



# WEEKLY EPIDEMIOLOGICAL BULLETIN

## WEEK 22 – 2023

(29 May – 4 June 2023)

### Editorial message

Effective and efficient disease surveillance system contribute to the reduction of morbidity, disability and mortality from disease outbreaks and health emergencies.

This weekly bulletin presents the epidemiological status of the priority diseases, conditions, and events under surveillance in Rwanda. These data are useful to trigger a rapid response for rapid impact, actions and results oriented, a proactive preparedness, risk mitigation and prevention, intelligence, real-time information, and communication for decision making.

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## KEY EPIDEMIOLOGICAL HIGHLIGHTS

### EPIDEMIOLOGICAL WEEK 22

#### Event Based Surveillance (EBS) Highlights:

- During epidemiological week 22, one alert was notified through the electronic Community Event Based Surveillance System (eCBS): one human death occurred in Mugesera Sector, Kabungo Cell, Rwinkwavu Village
- Alerts received through Epidemic Intelligence from Open Source (EIOS):

Tanzania declared the end of the Marburg Virus Disease outbreak which was confirmed just over two months ago in the north-western Kagera region.

#### Indicator Based Surveillance (IBS) Highlights:

- 113 immediate reportable diseases were notified by health facilities countrywide. They included cases of foodborne illness, acute flaccid paralysis (AFP), mumps, severe malaria; bloody diarrhea, measles/rubella, chicken pox, cholera, acute hemorrhagic fever and typhoid fever.
- 8 weekly reportable diseases and health events that include flu syndrome, simple malaria, severe pneumonia for under 5 years, non-bloody diarrhea for under 5 years, COVID-19, dog bites, brucellosis, and trypanosomiasis, are being reported on a weekly basis. A thorough analysis conducted for Epi Week 22 revealed that, simple malaria cases increased and crossed the epidemic threshold. This is indicating that there is a possible outbreak of simple malaria. A deep investigation is needed to confirm and identify possible affected areas and recommendations aimed to reduce simple malaria cases in concerned areas.
- A total of 55 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. The majority of deaths were classified as perinatal and deaths of children under the age of 5.

#### Ongoing outbreaks

In Epi Week 22, there was two outbreaks in Rwanda, identified in Kirehe and Gatsibo districts.

1. Ongoing Measles outbreak in Kirehe District.
2. Influenza type A Virus in Gakenke HC & Kiziguro DH- Gatsibo District

#### Other health event updates

The occurrence of floods and landslides caused by heavy rainfall occurred on 2<sup>nd</sup> May 2023 in Rwanda. It has affected 10 districts in Northern, Southern and Western Province s. As of 9<sup>th</sup> June 2023, 135 deaths, 134 buried, 1 missing, 111 injured, 4 hospitalized, 107 discharged, have been reported from the three provinces. In addition, a total of 5174 households have been destroyed by the floods.

## Completeness and timeliness

In Epi Week 22, the overall completeness and timeliness of reporting in Rwanda was 97% and 94%, respectively.

### WEEKLY UPDATES ON EVENT BASED SURVEILLANCE (EBS) EPIDEMIOLOGICAL WEEK 22

**Description:** Event Based Surveillance (EBS) is a type of public health surveillance system that detects and reports unusual health events or disease outbreaks in a timely manner. The system is designed to detect signals of potential public health threats and allow a rapid response to prevent or control the spread of diseases. RBC is implementing EBS through PHS&EPR Division.

Currently, an electronic Community Event Based Surveillance System (eCBS) and Epidemic Intelligence from Open Source (EIOS) are being used to detect and report events of public health importance from the community and media. The process for establishment of other types of EBS is still being on going.

#### COMMUNITY EVENT BASED SURVEILLANCE

During the Epi week 22, one alert was received from community: 1 case of Human Death.

A 2 months old, Male from Ngoma district, Mugesera Sector, Kabungo Cell, Rwinkwavu Village passed away on 01/06/2023. She developed fever and passed away on the way to the health facility.

#### MEDIA SCAN

During the Epi week 22, alerts were received through Epidemic Intelligence from Open Source (EIOS):

Tanzania declared the end of the Marburg Virus Disease outbreak which was confirmed just over two months ago in the north-western Kagera region. [https://twitter.com/WHO\\_Tanzania/status/1664589317426016256](https://twitter.com/WHO_Tanzania/status/1664589317426016256)

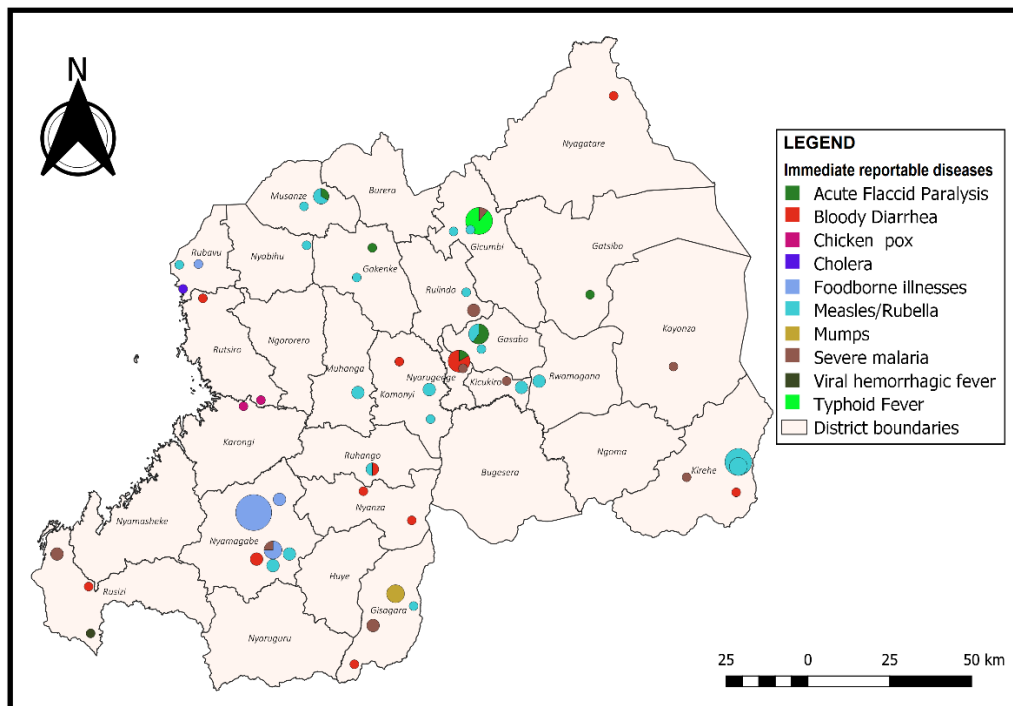
### WEEKLY UPDATES ON INDICATOR BASED SURVEILLANCE (IBS) EPIDEMIOLOGICAL WEEK 22

**Description:** Rwanda has been implemented Indicator Based Surveillance according to the IDSR 3rd guidelines where approximately 45 priority diseases, health conditions and public health events are being monitored and reported from health facilities countrywide on a regular basis. Diseases that are prone to outbreaks are being reported immediately within 24 hours after detection while diseases that are considered as endemic are reported on a weekly basis, every Monday before midday.

#### A. IMMEDIATE REPORTABLE DISEASES – EPI WEEK 22

During the Epi week 22; 113 suspected cases for immediate reportable diseases were notified: 22 cases of foodborne illness, 40 suspect cases of measles/rubella, 16 cases of bloody diarrhea, 4 cases of mumps, 12 confirmed cases of severe malaria, 7 cases of acute flaccid paralysis, 8 suspect cases of Typhoid fever, 2 cases of chicken pox, 1 case of suspected acute hemorrhagic fever, and 1 case of suspected cholera. (see figure below).

**Notes:** For the diseases requiring laboratory confirmation, samples were collected and sent to the National Reference Laboratory for testing. Meanwhile cases/suspected cases had been managed at the health facility level.

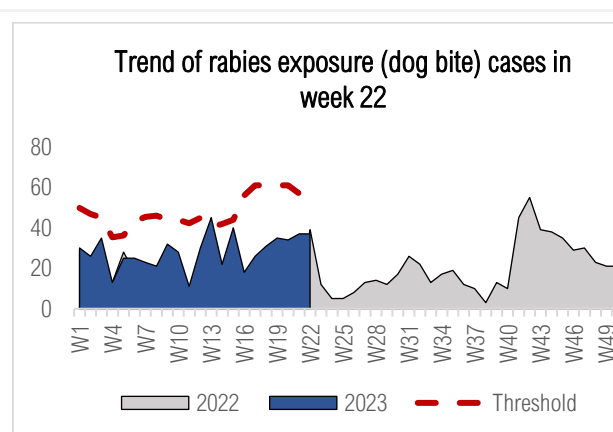
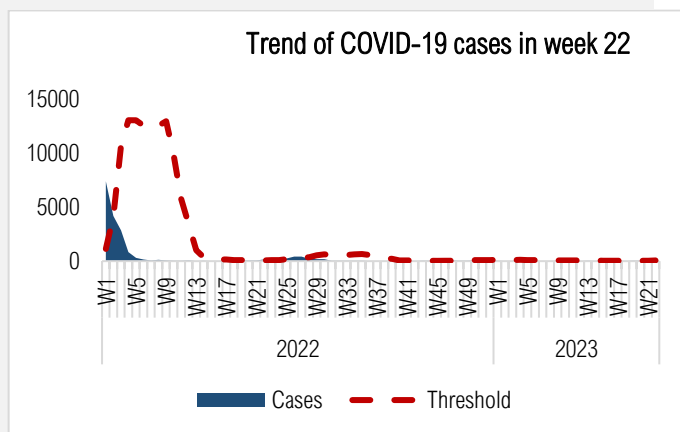
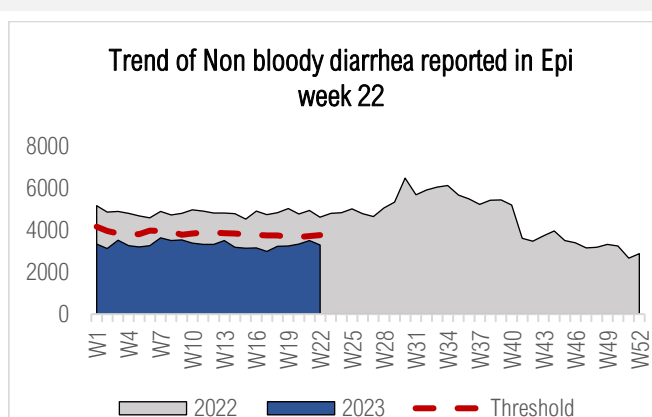
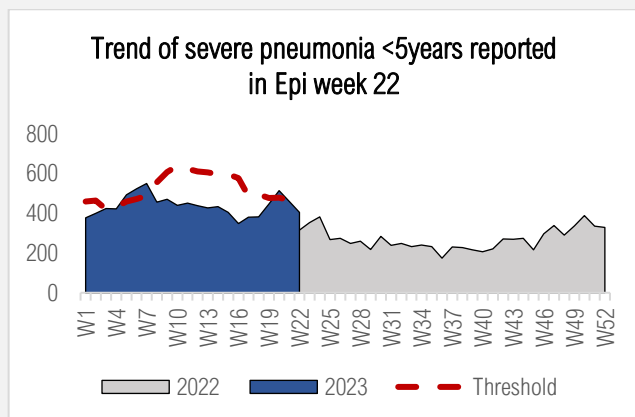
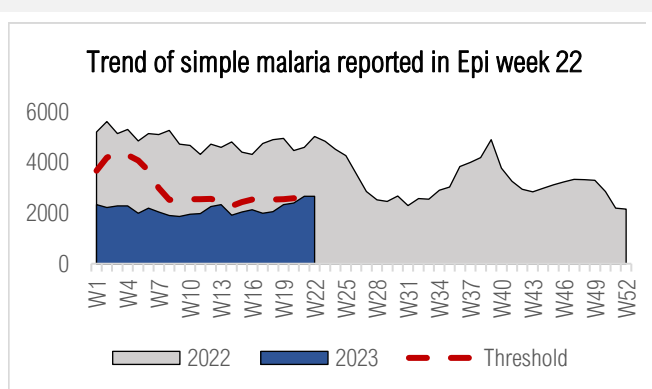
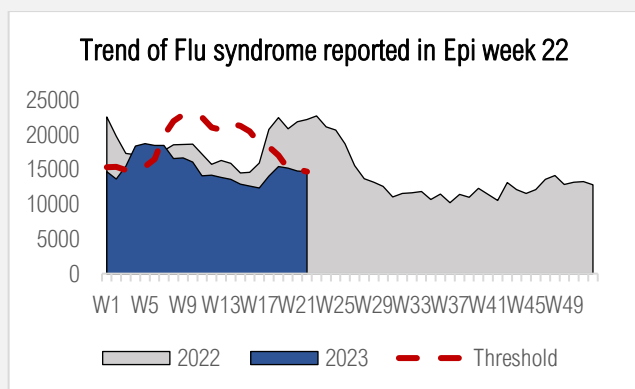


*Distribution of immediate reportable diseases in Epi week 22*

## B. WEEKLY REPORTABLE DISEASES – EPI WEEK 22

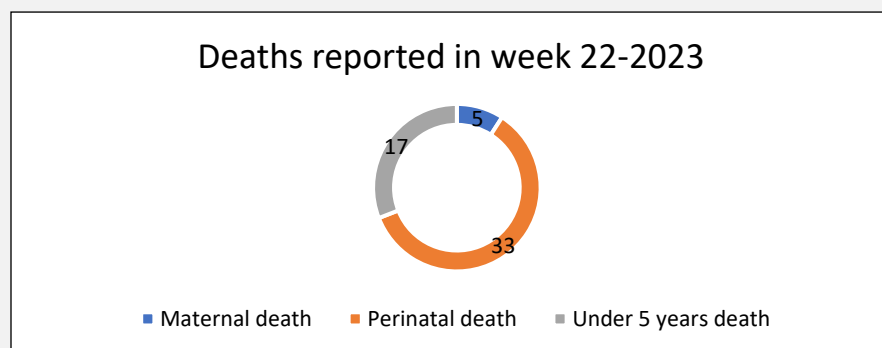
**Description:** In Rwanda, after the adaptation of the IDSR 3rd edition, eight diseases & events are being reported and analyzed on a weekly basis. These include flu syndrome, simple malaria, severe pneumonia for under 5 years, non-bloody diarrhea for under 5 years, COVID-19, dog bites, brucellosis, and trypanosomiasis. The monitoring trends of these weekly reportable diseases or health events helps to detect an unusual increase early.

In Epi Week 22, a thorough analysis was conducted, comparing the number of reported cases of the eight diseases monitored on a weekly basis to the epidemic thresholds. The results of the analysis revealed that among weekly reportable diseases, simple malaria crossed its respective epidemic threshold during two previous weeks (week 21 and 22). This indicates that deep investigation is needed and take actions in order to reduce them.



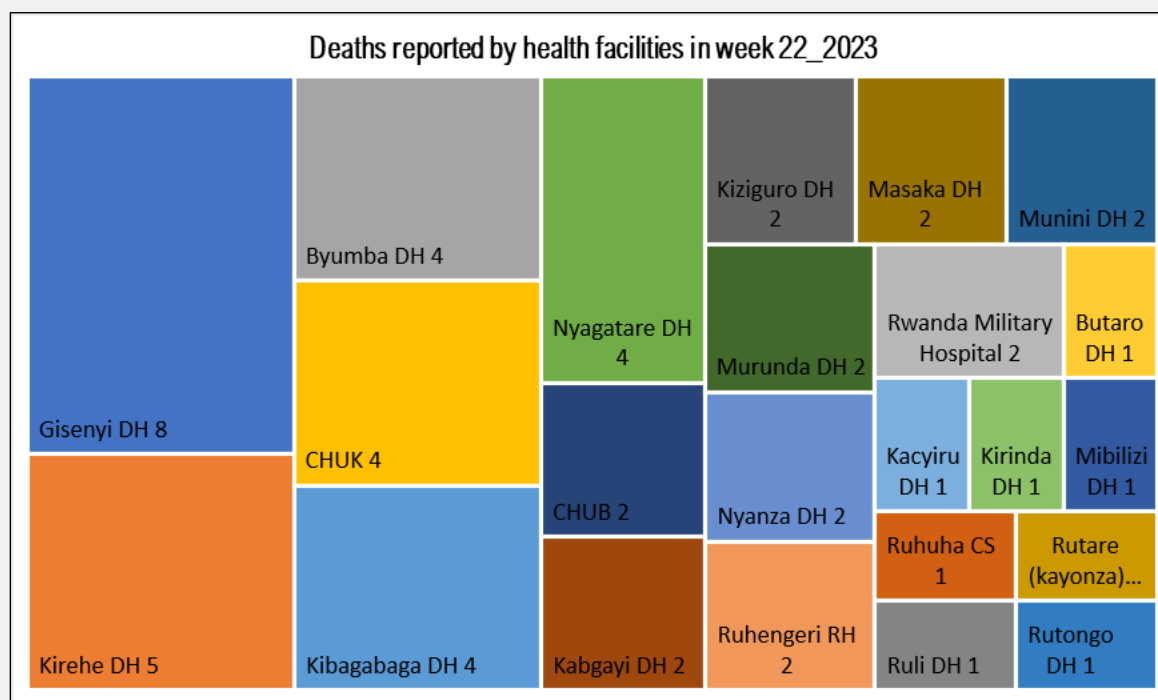
### C. DISTRIBUTION OF REPORTED DEATHS IN eIDSR – EPIDEMIOLOGICAL WEEK 22

In Epi week 22, as summarized in the chart below, a total number of 55 deaths were reported through the electronic Integrated Disease Surveillance and Response (eIDSR) system. Among these deaths, 33 (60%) were classified as perinatal, 17 (11%) deaths of children under 5 years old, 5(9%) maternal deaths.



#### *Cause of deaths declared in epi week 22*

Deaths were reported from various catchment areas as follow: 8 deaths in Gisenyi DH, 5 deaths in Kirehe DH, 4 deaths reported in each of the following hospitals: CHUK, Kibagabaga DH, Byumba DH, Nyagatare DH, 2 deaths reported in each of the following hospitals: CHUB, Kabgayi DH, Nyanza DH, Kiziguro SH, Masaka DH, Munini DH, Murunda DH, Ruhengeri RH, RMH; 1 death reported in each of the following health facilities: Butaro DH, Kacyiru police hospital, Kirinda DH, Mibirizi DH, Ruli DH, Rutongo DH, Ruhuha HC and Rutare (Kayonza) HC. (See figure below).



## OUTBREAK AND EVENT UPDATES

### EPIDEMIOLOGICAL WEEK 22

#### 1. MEASLES OUTBREAK

Confirmed cases	14	Date reported:	February 27, 2023	Risk assessment	Low
Epi link cases	57 (1 new)	Source:	NRL, eIDSR		
Death(s)	0	District:	Kirehe		
Total cases	71	Geoscope:	Low		

**Outbreak description:** The measles outbreak is still ongoing in Kirehe district since 27<sup>th</sup> February 2023. During Epi Week 22; 6 additional cases were identified in Mahama Refugee camp by laboratory confirmation in the previous week, which makes it a total of 14 laboratory confirmed cases and 57 cases confirmed by epidemiological link.

#### Ongoing interventions

- Continuous active cases search
- Case management (treatment, isolation)
- Vaccination

#### 2. INFLUENZA TYPE A VIRUS IN GAKENKE HC & KIZIGURO DH- GATSIBO DISTRICT

Confirmed cases	0	Date reported:	May 25, 2023	Risk assessment	Low
Suspected cases	76	Source:	NRL, eIDSR		
Death(s)	0	District:	Kiziguro DH and Gakenke HC		
Confirmed	13				
Total cases	89	Geoscope:	Low		

#### Description

On May 25<sup>th</sup>, 2023, Kiziguro DH reported a high number of patients consulting Gakenke HC and Kiziguro DH from Gakoni Polytechnic. A total of 24 patients were admitted at health facilities complaining of fever, cough, abdominal pain, and headache. Currently, all patients have recovered.

#### Recommendations and way forward:

Further investigations were conducted where Covid-19 rapid tests were taken and tested negative; blood smear for the patients that consulted the health facilities were taken and tested negative as well.

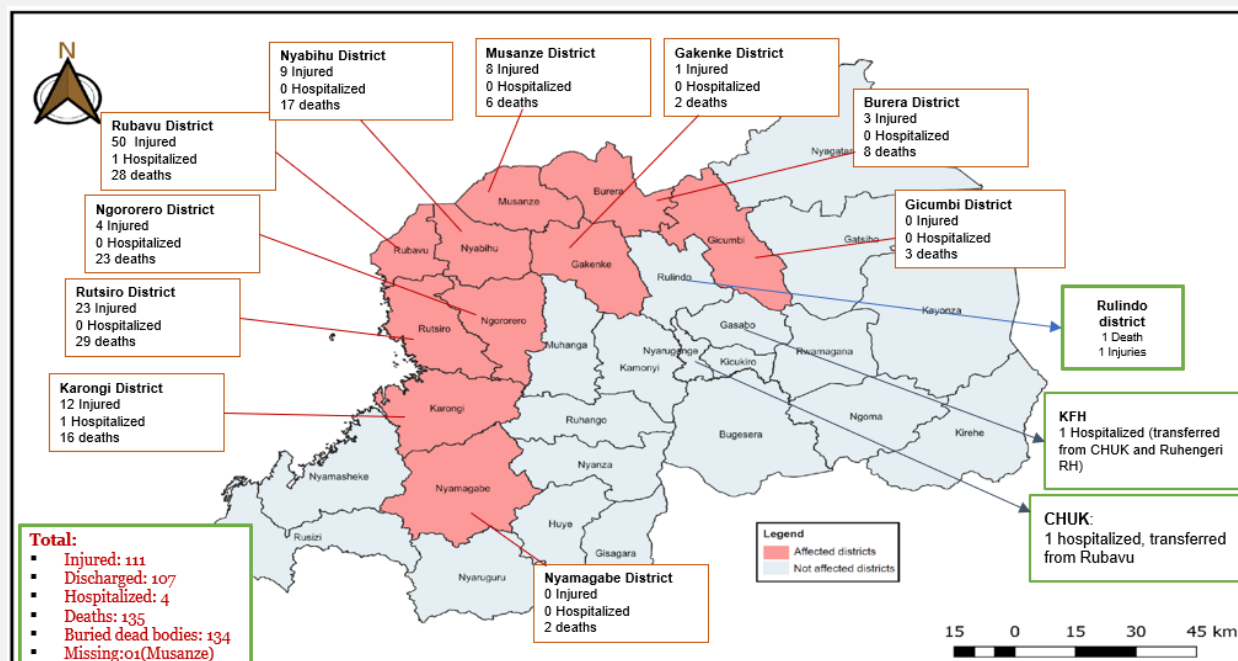
On May 25th, 2023, Kiziguro DH reported a high number of patients consulting Gakenke HC and Kiziguro DH from Gakoni Polytechnic. A total of 89 patients were recorded complaining mainly of fever, cough, and headache. 15 oropharyngeal samples were taken to rule out influenza and were sent to NRL. Among them, 13 samples tested positive for Influenza Type A virus. All were treated by health facilities, and currently 16 active cases are remaining.

### 3. OTHER EVENT UPDATES: FLOOD AND LANDSLIDES IN RWANDA

Injured	111	Date reported:	May,3 2023	Risk assessment	Moderate
Hospitalized	4	Source:	MINEMA		
Discharged	107	Provinces	Western, Northern, Southern		
Death(s)	135	Geoscope:	Moderate		

**Event description:** The ministry in charge of emergency management (MINEMA) reported the occurrence of floods and landslides caused by heavy rainfall which occurred on 2<sup>nd</sup> May 2023. The floods and landslides affected 10 districts in the Northern, Southern and Western of the country.

As of 9th June 2023, 135 deaths, 134 buried, 1 missing, 111 injured, 4 hospitalized, 107 discharged, have been reported from the three provinces. In addition, a total of 5174 households have been destroyed by the floods.



*Distribution of injuries and deaths as of 9th June 2023*



Rutsiro district has the highest number of deaths (29), seconded by Rubavu district (28 deaths), Ngororero 23 deaths, then Nyabihu and Karongi districts that reported respectively 17 and 16 deaths. The six remaining districts had less than 10 deaths.

For injuries, Rubavu district has the highest number of injured persons: 50, seconded by Rutsiro that counts 23 injuries and other affected districts have  $\leq 12$  injuries.

### Ongoing interventions

MINEMA activated a command center that coordinates the response. Some measures taken include:

- The people who were Evacuated and temporary relocation of residents from the high-risk areas had been supported for obtaining the houses to rent in community, while the rehabilitation and construction of their houses will be ongoing, and then among the 10 affected districts, 9 closed the IDPs sites, on site remaining in Rubavu district for 1672 people.
- Provision of food, and other basic supplies to displaced persons.
- Daily management of people in one remaining temporary site and those who returned in the community.

## eIDSR REPORTS COMPLETENESS & TIMELINESS EPIDEMIOLOGICAL WEEK 22

In Rwanda, eIDSR reports completeness and timeliness are scored as follow: **Greater or equal to 80%: High, Between 60% and 79%: Moderate, less than 60%: Low.**

In Epi Week 22, the overall completeness and timeliness of reporting in Rwanda were 97% and 94%, respectively. With regards to report completeness, almost all DH catchment areas had a score greater than 80%, except two hospitals that had moderate score for completeness: Ruhango PH had 63% and King Faysal hospital that had a very low score, as it did not submit the report.

As for timeliness, the overall score was high: 94%, many hospitals catchment areas had the score greater than 80%, but one hospital had a moderate score: Ruhango PH and one had a very low score: King Faysal hospital that did not submit the report.

**Notes:** it is important to note that the health facilities which did not perform are recommended to improve their reporting by providing complete reports on time in order to achieve effective surveillance and early detection of outbreaks.

Details, on completeness and timeliness for all health facilities are confined in the figure below.

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